Appl. No. 09/431,607 Amdt. dated March 16, 2004 Reply to Office Action of December 16, 2003

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-23 (canceled)

1 Claim 24 (currently amended): A composition comprising an inactivated 2 retrovirus, wherein the retrovirus is inactivated due to disruption of one or more CCHC zinc 3 fingers by contact with a compound selected from the group consisting of: disulfides having the formula R-S-S-R; 4 5 maleimides having the formula 6 alpha-halogenated ketones having the formula 7 hydrazides having the formula R-NH-NH-R; 8 nitric oxide; cupric ions and complexes containing Cu+2; and 9 ferric ions and complexes containing Fe⁺³; 10 11 wherein the compound is not 5,5-Dithiobis(2-Nitrobenzoic Acid), and wherein R 12 is any atom or molecule, and X is selected from the group consisting of F, I, Br and Cl, and 13 wherein contacting said retrovirus with said compound inactivates said retrovirus. 1 Claim 25 (previously presented): The composition of claim 24, wherein the 2 compound is selected from the group consisting of: Tetramethylthiuram Disulfide, 3 Tetraethylthiurarn Disulfide, Tetraisopropylthiuram Disulfide, Tetrabutylthiuram Disulfide, 4 Dicyclopentamethylenethiuram Disulfide, Isopropylxanthic Disulfide, O,O-Diethyl

- 5 Dithiobis-(Thioformate), Benzoyl Disulfide, Benzoylmethyl Disulfide, Formamidine Disulfide
- 6 2HCl, 2-(Diethylamino)ethyl Disulfide, Aldrithiol-2, Aldrithiol-4, 2,2-Dithiobis(Pyridine
- 7 N-Oxide), 6,6-Dithiodinicotinic Acid, 4-Methyl-2-Quinolyl Disulfide, 2-Quinolyl Disulfide, 2,2
- 8 Dithiobis(benzothiazole), 2,2-Dithiobis(4-Tert-Butyl-1-Isopropyl)-Imidazole,
- 9 4-(dimethylamino)phenyl disulfide, 2-Acetamidophenyl Disulfide, 2,3-Dimethoxyphenyl
- 10 Disulfide, 4-Acetamidophenyl Disulfide, 2-(Ethoxycarboxamido)phenyl Disulfide,
- 3-Nitrophenyl Disulfide, 4-Nitrophenyl Disulfide, 2-Aminophenyl Disulfide, 2,2
- 12 Dithiobis(benzonitrile), p-Tolyl Disulfoxide, 2,4,5-Trichlorophenyl Disulfide,
- 4-Methylsulfonyl-2-Nitrophenyl Disulfide, 4-Methylsulfonyl-2-Nitrophenyl Disulfide,
- 14 3,3-Dithiodipropionic Acid, N,N-Diformyl-L-Cystine, Trans-1,2-Dithiane-4,5-Diol,
- 15 2-Chloro-5-Nitrophenyl Disulfide, 2-Amino-4-Chlorophenyl Disulfide,
- 2,2-Dithiobis(1-Naphtylamine), 2,4-Dinitrophenyl p-Tolyl Disulfide, 4-Nitrophenyl p-Tolyl
- 17 Disulfide, and 4-Chloro-3-Nitrophenyl Disulfide.
- 1 Claim 26 (original): The composition of claim 24, wherein the compound
- 2 selected from the group consisting of disulfides having the formula R-S-S-R.
- 1 Claim 27 (original): The composition of claim 24, wherein the compound is
- 2 Aldrithiol-2.
- 1 Claim 28 (original): The composition of claim 24, wherein the retrovirus is
- 2 selected from the group consisting of *Lentiviruses* and *Oncoviruses*.
- 1 Claim 29 (original): The composition of claim 28, wherein said retrovirus is an
- 2 HIV-1 retrovirus.